REMARKS

The Applicant respectfully requests further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1-49 were previously pending in this application. Within the Office Action, Claims 1-49 have been rejected. Accordingly, Claims 1-49 are currently pending.

The Applicant and his attorneys would like to thank Examiner Nguyen and Examiner Kindred for their time and courteousness during the telephone interview on Monday, May 23, 2005. During the interview, differences between the present claims and U.S. Patent No. 6,253,188 issued to Witek et al. (hereinafter "Witek") and U.S. Patent No. 5,604,772 to Botto et al. (hereinafter "Botto") were discussed.

Rejections under 35 U.S.C. § 103

Within the Office Action, Claims 1-40 and 42 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Witek in view of Botto. The applicants respectfully disagree.

Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a newspaper web server and central web application server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence. [Witek, col. 12, lines 10-13] More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected. [Witek, col. 12, lines 27-37] The selected category and subcategory pair is identified by a category/subcategory ID 46. The specific parameters are entered as primary selection parameters 60 and as secondary selection parameters 62. The first part of the search process is limited to performing searches based on category, or in other words a hierarchical search. [Witek, col. 13, lines 30-46] During this first *utilization* of the search system of Witek, the user is *only* able to specify a category and subcategory pair. The second part of the search process is limited to performing searches based on entered parameters, in other words keyword search or

parametric search. During this second *utilization* of the search system of Witek, the user is *only* able to perform searches based on entered parameters.

As discussed above, Witek teaches that the user first navigates through the system and specifies a category and subcategory to narrow down the number of records to search. [Witek, col. 12, lines 27-37] According to the teachings of Witek, during this first part of the search process, only the category and subcategory search methodologies are available. Witek then teaches that the second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. [Witek, col. 17, lines 42-50] No other search methodologies are available during the second part of the search process. Witek does not teach that during the first part or the second part of the search process, each of the search methodologies are available. Accordingly, Witek does not teach that each utilization of the search module includes the availability of all types of available searches.

As recognized within the Office Action, Witek does not teach a dichotomous key search. Witek does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. Specifically, Witek does not teach that any of a keyword search, hierarchical search, dichotomous key search and parametric search can be used at any location within the database. As discussed above, Witek teaches that during the first part of the search process only the category and subcategory are specified and during the second part of the search process only searches based on entered parameters are available.

Botto teaches a transmission system and modem utilizing coded modulation. Botto appears to be cited because of its teaching of a zone searching module which determines a searched zone by dichotomy. Botto also does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. There is no motivation to warrant the combination of Witek and Botto. There is no hint, teaching or suggestion in either of Witek or Botto to warrant their combination.

This is a classic case of impermissibly using hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). As discussed above, Witek and Botto do not

teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search, as claimed. As recognized within the Office Action, Witek does not teach a dichotomous key search. Botto does teach a zone searching module which determines a searched zone by dichotomy. Within the Office Action, it is stated that

> [i]t would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Botto into the invention of Witek because the combination would reduce the memory access when using binary search, and providing user more search methodologies. [Office Action, page 3]

It is only with the benefit of the present claims, as a "template" that there is any motivation to combine the data modem of Botto with the classified ad system of Witek. No such motivation can be found in the teachings of either of the references. To conclude that the combination of Witek and Botto is obvious, based on the teachings of these references, is to use hindsight based on the teachings of the present invention and to read much more into Witek and Botto than their actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit.

It is well settled that to establish a *prima facie* case of obviousness, three basic criteria must be met:

1)   there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

2)   there must be a reasonable expectation of success; and

3)   the prior art reference, or references, must teach or suggest all the claim limitations. MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness based on the teachings of Witek and Botto has not been met within the Office Action.

There is no motivation to combine the teachings of Botto with Witek. Botto relates to a transmission system and modem utilizing coded modulation. Botto teaches that the zone searching module determines the zone of the reference quadrant by dichotomy according to an algorithm. [Botto, col. 5, lines 26-29] Botto is only cited because it teaches searching by dichotomy. There is no hint, teaching or suggestion in either Botto or Witek to motivate one skilled in the art to combine their teachings. It is only with the benefit of the presently claimed

invention as a "template" that one would consider combining the dichotomous search of Botto with the classified ad system of Witek.

Even if considered proper, the combination of Witek and Botto does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. Neither, Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

In contrast to the teachings of Witek and Botto, the method of and apparatus for performing a research task of the present invention, interchangeably utilizes a multitude of search methodologies. Specifically, utilizing a search module, a user is able to selectively utilize one or more search methodologies including keyword search, hierarchical search, dichotomous key search and parametric search to correlate a search criteria to a searchable database for generating one or more matching items. It is further taught within the present specification that

> [a]t each node within the tree, the user is presented with the option of using any one or combinations of the four search methodologies utilized by the research system. The four search methodologies are keyword search, hierarchical tree search, dichotomous key search, and parametric search. Regardless as to which search methodology or search methodologies are used to reach a particular node, the user can utilize any of the four search methodologies to further refine the search and move further down the directory tree structure. The user may also navigate back up the directory tree structure to a higher node, and once again have the option to use any of the four search methodologies to refine the search from the current node and move further down the directory tree structure. [Present Specification, page 43, lines 6-15].

Therefore, a user is able to navigate the directory tree structure, utilizing any one of the four search methodologies in any combination to reach the desired result. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

Within the Response to Arguments section of the Office Action, it is stated that

> Applicant does not clearly claim that "at any step location within the database, four different methodologies are available to be used to perform the search." Instead, Applicant only claims that "wherein each utilization of the search module

includes the availability of each search." Therefore, if the Witek reference discloses one of the methods and the method is available for the search process, then the Witek still can apply to the invention. [Office Action, page 9]

The Applicant respectfully disagrees. It is specified within the claims that the search module includes a keyword search, a hierarchical search, a dichotomous key search and a parametric search. This limitation requires that *all four* of the search capabilities are present within the search module. In order to properly be applied to the claimed invention, the cited reference(s) must teach or make obvious *all four* of the search capabilities. It is further specified within the claims that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search. Utilization is defined as "to put to use for a certain purpose." [The American Heritage Dictionary] Just as taught within the specification, the limitation that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search, specifies that *every time* the search module is used, each of the four search capabilities (keyword search, hierarchical search, dichotomous key search and parametric search) are available. Neither Witek, Botto nor their combination teach such a search module. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

The independent Claim 1 is directed to a method of performing a research task within a searchable database. The method of Claim 1 comprises utilizing a search module to correlate a search criteria to a searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, a dichotomous key search and a parametric search, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria and repeating the step of utilize the search module to correlate a subsequent search criteria until the research task is completed *such that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search.* As described above, the

combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search. For at least these reasons, the independent Claim 1 is allowable over the teachings of Witek, Botto and their combination.

Claims 2-13 depend on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 2-13 are all also allowable as being dependent on an allowable base claim.

The independent Claim 14 is directed to a research system for performing a research task within a searchable database. The research system of Claim 14 comprises means for accessing the searchable database and means for utilizing a search module coupled to the means for accessing to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, a dichotomous key search, and a parametric search *such that each utilization of the search module includes the availability of each search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of each search. For at least these reasons, the independent Claim 14 is allowable over the teachings of Witek, Botto and their combination.

Claims 15-26 depend on the independent Claim 14. As described above, the independent Claim 14 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 15-26 are all also allowable as being dependent on an allowable base claim.

The independent Claim 27 is directed to a research system for performing a research task within a searchable database. The research system of Claim 27 comprises a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent

matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein *each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search*. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search. For at least these reasons, the independent Claim 27 is allowable over the teachings of Witek, Botto and their combination.

Claims 28-36 depend on the independent Claim 27. As described above, the independent Claim 27 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 28-36 are all also allowable as being dependent on an allowable base claim.

The independent Claim 37 is directed to a network of devices for performing a research task within a searchable database. The network of devices of Claim 37 comprises one or more computer systems configured to communicate with other systems and a research server configured to couple to the one or more computer systems to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, a dichotomous key search, and a parametric search, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further

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wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein *each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search.* As described above, the combination of Witek and Botto is not proper. As further described above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search. For at least these reasons, the independent Claim 37 is allowable over the teachings of Witek, Botto and their combination.

Claims 38-40 depend on the independent Claim 37. As described above, the independent Claim 37 is allowable over the teachings of Witek, Botto and their combination. Accordingly, Claims 38-40 are all also allowable as being dependent on an allowable base claim.

The independent Claim 42 is directed to a method of performing a research task within a searchable database. The method of Claim 42 comprises utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search, a hierarchical search, a dichotomous key search, and a parametric search, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the segment of the searchable database, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and further wherein *each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search*, selecting one of the subsequent matching items and displaying a collection of related data corresponding to the selected subsequent matching item into an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related objects. As described above, the combination of Witek and Botto is not proper. As further described above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search. For at least these reasons, the independent Claim 42 is allowable over the teachings of Witek, Botto and their combination.

Within the Office Action, Claims 41 and 43-49 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Witek in view of Botto and further in view of U.S. Patent No. 6,292,796 to Drucker et al. (hereinafter "Drucker"). As described above, the combination of Witek and Botto is not proper. Accordingly, for the same reasons discussed above, the combination of Witek, Botto and Drucker is also not proper.

Further, even if considered proper, neither Witek, Botto, Drucker nor their combination teach that each utilization of a search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search. Drucker teaches a keyword search methodology where the search results can be sent to a user using a conventional push technology. Drucker does not teach using a search module including four different types of search capabilities. Accordingly, neither Witek, Botto, Drucker nor their combination teach using a search module including four different types of search capabilities.

The independent Claim 41 is directed to a method of performing a research task within a searchable database. The method of Claim 41 comprises performing one or more searches by utilizing a search module, the search module including a keyword search, a hierarchical search, a dichotomous key search, and a parametric search such that *each utilization of the search module includes the availability of each search*, to correlate a search criteria to a searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed. As discussed above, the combination of Witek, Botto and Drucker is not proper. As also discussed above, even if considered proper, neither Witek, Botto, Drucker nor their combination teach that each utilization of the search module includes the availability of each search. For at least these reasons, the independent Claim 41 is allowable over the teachings of Witek, Botto, Drucker and their combination.

The independent Claim 43 is directed to a method of performing a research task within a searchable database. The method of Claim 43 comprises performing one or more searches by utilizing a search module, the search module including a keyword search, a hierarchical search, a dichotomous key search, and a parametric search such that *each utilization of the search module includes the availability of each search*, to correlate a search criteria to the searchable database

for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed, categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included and accessing a specific node within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure. As discussed above, the combination of Witek, Botto and Drucker is not proper. As also discussed above, even if considered proper, neither Witek, Botto, Drucker nor their combination teach that each utilization of the search module includes the availability of each search. For at least these reasons, the independent Claim 43 is allowable over the teachings of Witek, Botto, Drucker and their combination.

Claims 44-46 depend on the independent Claim 43. As described above, the independent Claim 43 is allowable over the teachings of Witek, Botto, Drucker and their combination. Accordingly, Claims 44-46 are all also allowable as being dependent on an allowable base claim.

The independent Claim 47 is directed to a method of performing a research task within a searchable database. The method of Claim 47 comprises performing one or more searches by utilizing a search module, the search module including a keyword search, a hierarchical search, a dichotomous key search, and a parametric search such that *each utilization of the search module includes the availability of each search*, to correlate a search criteria to the searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed, categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included and accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree

structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure. As discussed above, the combination of Witek, Botto and Drucker is not proper. As also discussed above, even if considered proper, neither Witek, Botto, Drucker nor their combination teach that each utilization of the search module includes the availability of each search. For at least these reasons, the independent Claim 47 is allowable over the teachings of Witek, Botto, Drucker and their combination.

Claims 48 and 49 depend on the independent Claim 47. As described above, the independent Claim 47 is allowable over the teachings of Witek, Botto, Drucker and their combination. Accordingly, Claims 48 and 49 are both also allowable as being dependent on an allowable base claim.

For the reasons given above, Applicant respectfully submits that claims 1-49 are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, she is encouraged to call the undersigned attorney at (408) 530-9700.

Respectfully submitted,
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